AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

1. (Currently Amended) A method of controlling the coupling of multi-platform reservoir and network simulators comprising:

   synchronizing the advancement through time of the <u>reservoir and</u> network simulators <u>executing on a computer</u>;

   <u>translating</u> ~~converting~~ each of [[the]] <u>a plurality of</u> hydrocarbon fluid streams to a <u>common</u> fluid model of a controller <u>by converting pseudo-components of each of the plurality of hydrocarbon fluid streams to</u> ~~based on~~ a super-set of ~~corresponding~~ pseudo-components used in the <u>reservoir and</u> network simulators <u>executing on the computer</u>;

   ~~obtaining a coupled simulation using the converted hydrocarbon fluid streams;~~ and

   <u>performing a production operation based on simulations of the reservoir and network simulators</u> ~~generating a plan based on the coupled simulation, wherein the plan is implemented to improve production~~ of <u>a</u> ~~the multi-platform~~ reservoir<u>, the simulations performed on the computer using the converted hydrocarbon fluid streams</u>.

2. (Currently Amended) A controller for coupling multi-platform reservoir and network simulators comprising:

   means for synchronizing the advancement through time of the <u>reservoir and</u> network simulators;

   means for <u>translating</u> ~~converting~~ each of [[the]] <u>a plurality of</u> hydrocarbon fluid streams to a <u>common</u> fluid model of the controller <u>by converting pseudo-components of each of the plurality of hydrocarbon fluid streams to a super-set of</u> ~~based on corresponding~~ pseudo-components used in the <u>reservoir and</u> network simulators;

   ~~means for obtaining a coupled simulation using the converted hydrocarbon fluid streams;~~ and

   means for <u>performing a production operation based on simulations of the reservoir and network simulators</u> ~~generating a plan based on the coupled simulation, wherein the~~

~~plan is implemented to improve production~~ of [[the]] a ~~multi-platform~~ reservoir, the simulations performed using the converted hydrocarbon fluid streams.

3. (Currently Amended) The controller of claim 2 additionally comprising means for ~~applying production and injection constraints to the coupled simulation by~~ apportioning [[the]] global production and injection constraints between simulation tasks of the reservoir and network simulators.

4. (Original) The controller of claim 3 additionally comprising means for balancing reservoir and surface networks.

5. (Canceled)